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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,061	06/14/2001	Thomas Thoroe Scherb	P20845	6435

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EXAMINER

HASTINGS, KAREN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 09/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/880061

Applicant(s)

Scherb et al

Examiner

HASTINGS

Group Art Unit

1731

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 6/01; 9/01
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-52 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-52 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- *Certified copies not received: _____.

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____ ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the

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inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

At least claims 1, 3-5, 8, 9, 17, 19, 22, 25, 27, 29, 31, 32, 41, 43 and 46-52 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Laapotti '046.

Fig 1 of Laapotti has steam overpressure box 55 opposite suction box 65 prior to an extended nip press shoe press unit with a drying roll 11 which may be heated by any of a variety of means either external or internal. See column 4 lines 32-65. Note column 7 lines 8-11. Note also Figure 2, loading cylinders 31 and piston rods 32 arranged crosswise to the web travel direction which may be controllable independently of one another.

No structural or method distinctions can be seen from these claims over this reference.

At least claims 1, 3-7, 17, 19, 21-25, 27-31, 41, 43 and 45-52 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Crouse.

Note Crouse in various embodiments teaches a suction apparatus such as in Figure 4, suction box 132 with an overpressure provided by steam at 122 over it. There may also be

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a suction roll 134 following it (and suction roll 132 before it), multiple carrying belts/felts F1, F2, and an impermeable press belt B1 over a press shoe 24 which is opposite a dryer cylinder 70. Note also steam hood at 140 opposite suction roll 138 again prior to a shoe press nip with a heated roll 72 in Figure 4. Note relevant description thereof also. Note the extended nip press may be an apple type shoe as shown in Figure 1, or a belt looped shoe press.

No distinctions can be seen between these claims and the apparatus/method described in Crouse.

At least claims 1-7, 10, 17, 19, 22-29, 30, 31, 33, 34, 41, 43 and 46-52 are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Schiel '349.

Note Schiel teaches a steam hood 13 over a suction apparatus 16, 17 which may be a suction box and/or a suction roll (column 6 lines 1-9, emphasis provided). Further note extended nip press roll at 9, 29 opposite the Yankee drying cylinder with creping blade 11, 12.

None of the current claims is seen to distinguish over the method and apparatus disclosed in Schiel '349.

Claims 1-52 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tietz et al/EP 926296 in view of Millspaugh, as necessary with Schiel '349 and/or Kanitz et al.

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Tietz et al, US equivalent to EP '296, shows an apparatus and method as claimed in most of these claims except it does not teach that hot air or steam ~~overpressure~~ may be applied around suction roll 6. Compare Figure 1 of the instant case with the sole Figure of Tietz et al/EP '296.

However, providing a hot air hood (or steam) opposite a suction roll to aid in dewatering in a papermaking machine is very well known and conventional as may be exemplified in the paragraph bridging the two columns of page 4 of Millspaugh. Furthermore as even necessary, Schiel '349 teaches in a tissue making machine the obviousness of hot air or steam opposite a suction device (note column 6 lines 1-10, IR devices would inherently provide hot air), and/or Kanitz et al. also exemplifies use of an air press with hot air opposite suction in a tissue making machine. Note for example only Figure 5 of Kanitz et al, hot air press 50 and also steam shower 44 positioned over a vacuum box 46 and multiple vacuum boxes 42, etc. etc. in a tissue making machine.

Thus it clearly would have been prima facie obvious to one of ordinary skill in the art to provide the well known feature of a hood opposite suction roll 6 of Tietz et al and/or to provide either steam or hot air and a suction device to enhance the dewatering of the paper web prior to the extended nip press 10 of Tietz et al/EP '296. Furthermore the addition of an additional

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suction box would have been prima facie obvious to one of ordinary skill in the art for the well known advantages of an additional suction box providing additional dewatering effect as needed. The applied references indeed exemplify numerous suction dewatering devices for dewatering the paper web as appropriate.

Note all dependent claims are either drawn to conventional features that are exemplified in the applied references and/or technical features that are very well known to those of ordinary skill in the art and as such would have been prima facie obvious technical options to use on the tissue making machine of EP '296.

Claims 13-20 and 37-44 are also rejected under 35

U.S.C. 103(a) as being unpatentable over the references as applied to the claims above, and further in view of Morton and/or Lee et al.

Morton exemplifies that an imprinting fabric may be the second fabric carried through a twin wire forming zone and onto a Yankee creping cylinder to make a tissue web. Likewise, Lee et al. exemplifies that a fabric may be a felt 24 or may be a fourdrinier fabric/wire.

Thus clearly the choice of an appropriate fabric for the fabric 5 in Tietz et al/EP '296 (or in any other primary reference applied to an appropriate claim above) would have been a design choice well within the level of ordinary skill in the

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art in order to obtain the advantages of these known alternative fabrics for the tissue making machine.

Claims 8, 9 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to the claims above, and further as needed in view of Wanke et al. and/or Dahl et al. and/or Laapotti '046.

Each of Wanke et al., Dahl et al. and Laapotti '046 exemplifies the well known technical feature of independently controlled crosswise pressing zones in an extended press nip. Therefore to use this well known technical feature in the extended nip press of any primary reference applied to an appropriate claim above would have been prima facie obvious in order to obtain the well known advantages of such a technical feature as exemplified by these references.

Note Tietz et al also explicitly teaches this feature.

Claims 21 and 45 are also rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to the claims above, and further in view of Crouse and/or Kade et al.

Both of Crouse and Kade et al. exemplify the well known technical feature of having multiple dewatering fabrics in an extended nip press. Thus for example only, note Figure 4 of Crouse wherein both felts F2 and F1 are in the extended nip press and Figure 6 of Kade et al. wherein there are at least two press felts each on either side of the extended press nip. Therefore

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to use an additional fabric through the extended nip press at 10/2 of Tietz et al/EP '296 (or in any other primary reference applied to an appropriate claim above) would have been prima facie obvious for the well known advantages of enhancing dewatering by having multiple fabrics on one or both sides of the press nip, as exemplified by both of the two applied references.

Claims 21, 31 and 45 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Claims 21 and 45 are unclear in reciting "an additional" felt belt since no previous felt belt has been positively recited in any claims from which these depend. Correction/clarification is necessary. Claim 31 needs to depend from claim 30, and not claim 25, in order to have antecedent basis for "said suction element".

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cronin '192 especially at Figure 2 which shows steamhood box 40A opposite suction roll 26 then a further steam box 41 then an extended nip press is cited of interest (note it likewise anticipates many of the claims, but to avoid even more multiple rejections is not applied at this time).

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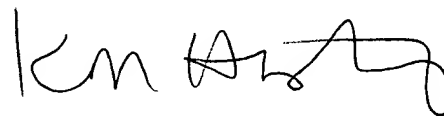
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Krake is cited to exemplify multiple vacuum boxes 10 to enhance dewatering of a felt or fabric coming from a twin wire zone to a Yankee dryer cylinder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Hastings whose telephone number is (703) 308-0470. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on (703) 308-1164. The fax phone number for this Group is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0651.



Karen M. Hastings
Senior Primary Examiner
Art Unit 1731

KMH/cdc
September 16, 2002

9/02